BIOGRAPHICAL NOTICES

OF MEDICAL OFFICERS RECENTLY DECEASED.

GEORGE GREEN SPILSBURY, Esq., M. D.

We are convinced that a large circle of our brethren in India and elsewhere will share the feelings of affectionate grief with which we put on record the demise of the Nestor of the Bengal Medical Service. The late Doctor Spilsbury's career extended over a period of no less than forty-six years' active service in India. Until his last fatal illness, he was often heard with gratitude to dwell on his singular good fortune in never having been under the necessity of applying for a single day's leave of absence. His excellent constitution was strengthened by a singularly temperate mode of living. During six months from the 1st of April, Dr. Spilsbury's fare was rigidly vegetable, and his beverage was water. With the approach of the cold season he reverted to a more generous diet, yet temperate withal.

Immediately after passing his examination, Dr. Spilsbury was appointed Civil Surgeon of Sierra Leone, from whence after a residence of some 15 months he returned to England and obtained a commission as Assistant Surgeon on the East India Company's Bengal Establishment. His first commission was dated the 17th August 1811, and in the month of October following we find among the list of passengers on the good ship "Baring," the "young Assistant Surgeon," donning in Calcutta for the first time the identical full dress uniform which after a lapse of 46 years, the Physician General loved to exhibit to the generation of 1857.

During the years of 1814-15-16, Dr. Spilsbury served throughout the war with Nepal, for which he was decorated with a medal. After having taken part with his Regiment in the siege of Hattrass, he served in 1817-18 in the Centre Division of the grand army under the command of the Marquis of Hastings. In 1819 he proceeded with the Field Force sent into the Puckmurree Hills against the ex-Rajah of Nagpore, after which he was present at the siege and capture of Asseerghur. These eventful years of military services were followed by quieter times during which Dr. Spilsbury filled the office of Civil Surgeon of Jubbul-

pore, in a manner so eminently useful, that Government determined to continue his services there after his promotion as Surgeon, on the 27th September 1823. In order however, in due course of time to qualify himself for the higher grade, it became necessary to vacate Saugor, and accordingly we find Senior Surgeon Spilsbury, during the prescribed period of two years, serving as Regimental Surgeon. On the 31st January 1844 he was promoted on the Staff as Superintending Surgeon, and appointed first to the Saugor Division, and subsequently to the Cawnpore Circle. On the 26th August 1853, he obtained a seat in the late Medical Board, in which he closed his honourable career as Physician General.

Endowed with a clear intellect, to the very close of life Dr Spilsbury was distinguished by unwearied industry, and he never lost an opportunity to add to his stock of knowledge. While engaged in the active duties of his profession, he established the name of a highly skilful and experienced Officer. His extensive library bore testimony to the varied nature of his reading. Besides with professional literature, it was enriched with standard works upon Theology, Natural Sciences, Oriental Literature and Antiquities, History and Arts. The result of his intimate acquaintance with the Hindustani and Hindee languages, appears in his Hindustani translation of the London Pharmacopæia, Calcutta 1845, and in the Journal of the Asiatic Society of Bengal, we find the following Archæological contributions: Note regarding the Bhilsa Monument, IV. p. 712;—Notice of a Grant engraved on Copper, found at Kumbhi, in the Saugor territory, VIII. p 481.

To an observer of nature like Dr. Spilsbury, the valley of the Nerbudda offered a rich harvest, and the geological collections which he eventually presented to the Asiatic Society of Bengal, form a conspicuous feature in their Muscum. What render them particularly valuable and establish the reputation of Dr. Spilsbury, are the following essays, which he contributed to the Journal of the Asiatic Society of Bengal, viz., Geological Section across the Valley of the Nerbudda, III. p. 388;—Notice of new sites of fossil deposits in the Nerbudda Valley, VI. p. 487;—On fifteen varieties of fossil shells, found in the Sangor and Nerbudda territories, VIII. p. 708;—On Bos Gaurus, IX. p. 551;—Notes of a march from Brimhan Ghaut on the Nerbudda, to Umurkuntuk, the source of that River, IX. p. 889;—Fossil discoveries in the Volley of the Nerbudda, X. p. 626;—Notes on Nerbudda Fossils, XIII. p. 765.

He was also the author of the following essays. On small Pox after vaccination Med. and Phys. Transact Vol. III. Notices of two hot springs situated in the Valley of the Nurbudda. India Journal of Medical Science, Vol. I. On salivation produced by small doses of Mercury, &c., Do. new Series, Vol. III. On the Facility with which Natives in India recover from severe accidents. Hydrophobia cured, (prevented?) Mixed blood. His name also appears in the list of Medical Officers, whose labours have been embodied in the Cholera Report, published by the Medical Board, Calcutta, 1820. In a green old age he attained to the summit of the service. In every grade indeed he established for himself the reputation of being a thorough efficient Officer. Whatever was his duty, he did it well, and at the moment when it was required, and although far from carrying discipline to extremes, he expected the Officers who served under him to follow his example.

His goodness of heart, his unostentatious charity and his hospitality, need no comment from us. As he continued single and was in every sense a just economist, he could indulge in the luxury of exercising these virtues. It was perhaps his independence and his singleness of purpose, which by degrees tended to develope little harmless whims, which became second nature. What the Spectator remarks of the worthy Baronct of Worcestershire, might to a certain extent be said of Doctor Spilsbury, he was singular in his behaviour, but his humour created him no enemies, for he did nothing with sourness or obstinacy, and his being unconfined to modes and forms made him the readier and more capable to please and oblige all who knew him. We all remember his singular hieroglyphic notes, which he was in the habit of addressing on the covers of replies to private letters after they had remained during a period unopened on his library table. In March 1857 he was attacked with a low typhoid fever, to which all the skill and the unremitting attendance of the professional friends who flocked to his bedside would have proved of no avail, had not a most uncommon constitution carried the patient through. Throughout his severe illness his head, indeed, continued unaffected, and his ruling singularity continued strong. To a common friend he dictated the most detailed instructions regarding his own funeral, which was. to be "plain and free from all trappings of woe." To the words of "a plain grave," he subsequently added in a note, "no bricks; what is the use of giving the worms additional trouble?" His recovery was very slow, but sufficient to warrant his friends in pressing upon him the necessity of a voyage to Europe. Unfortunately the solicitude of friends was suffered to pass unheeded and the opportunity was lost. After lingering through a relapse, Dr. Spilsbury expired in his 73rd year on the morning of the 6th July 1857.

We have reason to believe that there are those to whom his death first has revealed him to have been their unknown benefactor, and we know that bitter tears of children, in India and in Europe, have flowed on hearing the loss, of their fatherly friend, their "dear old Spil."

HENRY WALKER, M. R. C. S. E., H. E. I. C. S.,

PROFESSOR OF PHYSIOLOGY AND COMPARATIVE ANATOMY IN THE MEDICAL COLLEGE OF CALCUTTA.

From the Lancet July, 1857.

It was our painful duty lately to record the death of this distinguished man, whose loss to science and the public service it will be difficult to repair. The deceased was the son of William Walker, a cooper, in Huddersfield, and was born on the 10th of April, 1803. He received his early education in Huddersfield, and, even as a boy, was remarkable for his perseverance and habits of study. At the age of fourteen, he was apprenticed to the late Mr. Irving of Lockwood, and he served an apprenticeship of five years, partly with Mr. Irving, and partly with Mr. Bradshaw, Surgeon, at Huddersfield. During this period he not only laboured to acquire a knowledge of his profession, but he

also devoted himself with great zeal and assiduity to the study of the Greek and Latin classics. At the end of his apprenticeship he removed to London, studied Anatomy at the Webb-street School of Medicine, and, for two years, attended the hospital practice at Guy's and St. Thomas's Hospitals. In 1824, he passed the Apothecaries' Hall; and, shortly after, a dispensary having been established at Leeds, he was elected, by competition, as the most efficient out of several candidates for the appointment of resident medical officer. He held this appointment for three years, and was particularly distinguished for the zeal with which he applied himself to acquire a knowledge of the use of the stethoscope, an instrument then but recently introduced into practice, and for his pathological researches. He never lost an opportunity of examining the bodies of those patients who died under his care; and on one occasion, on which he had opened the body of an Irish girl without permission, he was so mobbed and menaged by the friends, that he had to make his escape by a back window, in female attire. On leaving the dispensary, he was appointed house-surgeon to the Leeds Fever Hospital. Here he remained four years, and occupied all his spare time in making up the deficiencies of his early education, by studying mathematies, the French and German languages, and by learning drawing. In 1832, he became a Member of the Royal College of Surgeons, and afterwards proceeded to Paris, where he spent two years in prosecuting his studies in the various hospitals of that city. From Paris he removed to Berlin, where he remained for three years as a favourite pupil of Müller, (with whom he afterwards kept up a constant correspondence,) and where he became imbued with all the fondness of his great master for the studies of histology, comparative anatomy, and embryonic development. From Berlin he returned to London, and was appointed Demonstrator of Anatomy at the Webb-street School of Medicine, under Mr. Grainger. While he held this appointment, he was remarkable for his deep knowledge of anatomy, both human and comparative, and for his success in teaching. He assisted Dr. Marshall Hall in some of his experiments upon the nervous system; and through his influence, in 1839, he received the appointment of assistant-surgeon in the Hon. East India Company's Service.

At the age of thirty-six Mr. Walker proceeded to Bengal; and, from his first entering the service, he determined to devote his life to science, with but little regard to pecuniary recompense. Soon after his arrival in Calcutta he was appointed, on special recommendation. assistant-surgeon at Gowhatti, in Upper Assam, where he spent two years in investigating the Fauna of that country. After this he was appointed surgeon to the Governor-General's Body Guard under Lord Auckland, and afterwards under Lord Ellenborough. Ilc was present with Lord Ellenborough at the battle of Maharajpore, and greatly distinguished himself by his services in the field. Before Lord Ellenborough quitted India, Mr. Walker was appointed personal surgeon to the Governor-General, which post, at Lord Ellenborough's recommendation, he continued to hold under Lord Hardinge. He accompanied Lord Hardinge during the whole of the campaign on the Sutledge; had his horse wounded under him during the night at Moodkee; and, although only called upon to attend the Governor-General, yet, in lack of sufficient surgeons, he was on every occasion one of the most active operators in the military hospitals. So marked were his services during this campaign, that, on the army of the Sutledge breaking up, the Right

Honorable the Governor-General of India inserted the following paragraph in the General Orders of February 14th, 1846, which was afterwards copied into the *London Guzette* of April 1st (p. 1220): "His (the Governor-General's) thanks are due to Dr. Walker, surgeon to the Governor-General, whose ability is only to be equalled by his zeal and humanity."

In consideration of his services, Mr. Walker, though only an assistant-surgeon, was offered by Lord Hardinge the lucrative post of Superintending Surgeon of the Gwalior Contingent, one of the best appointments in the service, and which was coveted by men much his senior in rank. This appointment, however, he declined, in order that he might realize his favourite idea of organizing the Medical College of Bengal. He was accordingly, towards the end of 1847, appointed Professor of Anatomy and Physiology at Calcutta. From the first, he resisted all the temptations to private practice, which in Calcutta is peculiarly attractive, and to which his high reputation would speedily have introduced him, and resolved to devote himself entirely to his collegiate duties. In these he manifested an intense interest, and was the mainspring and author of every important alteration in the curricular system of education, and, in fact, was one of the principal means of raising the system of tuition in the College to its present high character. At the same time, he kept up his researches in comparative anatomy, and made annual expeditions to the coast of Arracan, for the purpose of investigating the structure and habits of the zoophytes and the other lower orders of marine life. He collected an immense number of preparations and drawings, his aim being to found in the capital of India, for the Hindoos, a great museum, which might rival that of John Hunter. To give an idea of the amount of work which his professorial dutics involved, it may be mentioned, that, during the last session at the Bengal Medical College, 1,100 bodies were dissected, entirely under his superintendence. Mr. Walker also took a prominent part in the proceedings and management of the Asiatic Society.

At the close of 1855, Mr. Walker had a serious illness, which left him so debilitated that his friends advised a visit to Enrope as indispensable for the restoration of his health. He, however, chiefly in conscauence of his slender means, did not follow their advice, but contented himself with his annual tour to Arracan. By this he was considerably invigorated; but, soon after his return to Calcutta, symptoms of disease of the kidneys manifested themselves which made insidious but rapid progress. In March 1857 his health completely broke down. and he was compelled, though reluctantly, to resign his duties, and sail for England, after upwards of seventeen years' continuous service in India. On his arrival in London, on the 4th of May, he put himself under the care of his old friend and colleague, Dr. Jackson, to whose house, at Hendon, he shortly after removed. He was also seen by Drs. Bright and Bence Jones; but, notwithstanding everything was done which medical skill could suggest, he became suddenly worse, and on the 22nd of May he expired, in the fifty-fourth year of his age, deeply regretted by every one who know his sterling worth and ardent love of science.

Throughout his whole life, Mr. Walker was singularly notable for his plain, blunt character, straightforwardness and generosity. Lord Hardinge was wont to say of him, that he was the most disinterested

man he had ever met with in his life. His integrity, zeal, and ability, were held in the same repute by Sir Henry Elliot, Sir F. Currie, Colonel Beuson, Colonel Stuart, and all the high Government functionaries with whom he came in contact. The officers of Lord Hardinge's personal staff never mentioned his name without affection and esteem.

It is believed that he has left behind a large amount of scientific materials, some of which are in England, in a condition nearly fit for publication. His relatives have given powers to his friends and former colleagues in the Medical Colleges, Drs. Jackson and Falconer, and to Mr. J. W. Grant, of Elchies, N. B., to concert measures for carrying this into effect. We feel sure that his works will form a lasting monument to his fame as a physiologist and comparative anatomist.

LIST OF THE MEDICAL OFFICERS OF THE BEN-GAL ESTABLISHMENT WHO HAVE FALLEN DURING THE RECENT MUTINY.

SURGEONS.

1.—Senior Surgeon James Graham, M. D.—Superintending Surgeon Trans-Ravee Circle. Murdered during the Mutiny at Sealkote. Dr. Graham accompanied by his daughter was attempting to escape to the Fort in his buggy when he was shot by Troopers of the 9th Cavalry: Miss Graham was spared and drove on, carrying with her the lifeless body of her father.

Dr. Graham entered the service in 1819, and, having accumulated a comfortable independence, intended to retire during the present cold season. The following is a summary of his war services:—"Served as Staff and Senior Surgeon with the left wing of the Army of Gwalior, and was present at the battle of Punniar, in December 1843, served throughout the Sutledge Campaign, was present at the battle of Ferozeshuhur, and, after that action, was appointed Superintendent of Depôt Hospitals for all the sick and wounded of the Campaign, was present with the Brigade of Horse Artillery at the battle of Sobraon, 2 Medals."

- 2.—Christopher Garbett, Officiating Superintending Surgeon at Cawnpore. Mr. Garbett was in the intrenclument with the force under Sir Hugh Wheler, and it is said that he died of fever there. He arrived in India in 1827, and had no war services.
- 3.—Surgeon John Bannatyne MacDonald, 41st Regt N. I., escaped to Lucknow and died there, on the 10th August, from cholera Served in the Cole Campaign of 1832, present at the battles of Moodkee, Ferozshuhur, and Subraon, Medal and 2 Clasps.
- 4.—Surgeon H. H. Bowling, 28th Regt. N. I. This Regiment, stationed at Shahjehanpore, murdered its Officers while they were in Church, surrounding them and shooting them down.
- 5 Surgeon Kinloch W. Kirk, M. D.—Superintending Surgeon of the Gwalior and United Malwa Contingents. During the Mutiny at Gwalior, on the evening of the 14th June, Dr. Kirk, was shot in pre-

sence of his wife, who pleaded to give her life for his. Dr. Kirk, was one of the ablest and most promising Officers in the Service, and was so remarkable for professional zeal and administrative ability, that he was specially selected for the post he then held. His humanity was untiring, and a high Military Officer, (who himself escaped in that terrible night,) writing to us soon afterwards said "Poor Kirk! I am so sorry for him: he could not have injured a living creature."

Dr. Kirk entered the service at the close of 1838, and served in Bundelkund in 1842, and against the Hill Tribes in Scinde, under Sir Charles Napier, in 1845.

He was the author of an elaborate and ingenious paper, on the Fevers of Scinde, which was published in the transactions of the Medical and Physical Society of Calcutta. He also published an admirable report on the "Medical Topography of Upper Scinde." The Lunatic Asylum at Bareilly, while under his Superintendence, was a model of what such institutions for natives ought to be.

- 6.—Surgeon Nathaniel Collyer, stood next in the list to Dr. Kirk, he was Surgeon to the 53rd N. I. stationed at Cawnpore, and is said to have died of fever in the intrenchment there, a vietim to the awful privations and exposure of that indefensible position.
- 7.—Surgeon Wm. R. Boyes M. D. 2nd Lt. Cavalry, and Officiating Medical Storekeeper, Cawnpore.
- Dr. Boyes and his family all perished in the bloody massaere at Cawnpore.
- 8.—Surgeon A. W. R. Newenham, formerly Residency Surgeon Indore, joined the 1st N. I. on promotion, and perished in the Cawnpore massacre, with his wife and three children.
- 9.—Surgeon Thomas C. Heathcote, 10th N. I. Futtehgurh. He escaped from Futtehgurh, and with his whole family perished in the attack on the boats near Cawnpore. This Medical Officer was formerly Civil Surgeon of Saharunpore, where he was well known as a most expert and successful Lithotomist.

ASSISTANT SURGEONS.

Assistant Surgeon J. M. Hay, M. D.—Civil Surgeon, Bareilly. During the Mutiny, Dr. Hay, with Mr. Robertson, the Judge of the Station, took refuge in the house of the Kotwal, a native official who appears to have exerted himself to protect them, but the Mutineers found out their place of coneealment, and barbarously murdered them.

Assistant Surgeon Samuel Maltby, Civil Surgeon, Futtehgurh. Killed with his wife in the attack upon the boats, after leaving the Station.

Assistant Surgeon John Colin Graham, M. D. Medical Storekeeper, Sealkote: shot by the Mintinous Troopers of the 9th Cavalry, when driving to the Fort with his wife who was spared.

Dr. Graham, established the Fund for the widows and orphans of the Subordinate Medical Department, and was its active manager up to the time of his death. Served throughout the Punjaub Campaign, was present at Mooltan, Soornjkund, and Gnjerat, and the subsequent pursuit under Sir Walter Gilbert. Medal and Clasps.

- 1844.—Thomas Mawe, 12th N. I. Escaped during the massacre at Jansi, and perished of fatigue and exposure. Mrs. Mawe's account of their sufferings is most affecting,—she survives her husband. Mr. Mawe served throughout the Punjaub Campaign. Medal and Clasps.
- 1845.—Hartwell S. Garner, 12th Irregular Cavalry. Mr. Garner, and his wife were both murdered by the Troopers of his own Regiment, that had long remained loyal under their brave and generous Commanding Officer, the late Major Holmes: one child of Mr. Garner's was saved through the faithfulness of a native nurse.
- 1845.—Robt. Dallas Dove Allan, M. D. Is supposed to have perished in the Cawnpore massacre, with his wife and child, served at Moodkee, Ferozeshuhur and Alliwal. Medal and 2 Clasps, also in Punjaub Campaign, Medal and 2 Clasps.
- 1847.—W. B. McEgan, M. D. 14th Irregular Cavalry, massacred with his wife at Jhansi, Dr. McEgan, had seen some rough service with the 2nd Nizam's Cavalry, in the Deccan.
- 1847.—Thomas Moore, M. D., B. A.—Murdered while travelling by dâk to join his appointment at Sumbulpore in November, was present in the Sutledge Campaign. Dr. Moore was author of a volume entitled "Selections from my Note Book," published in Calcutta in 1852.
 - 1848.—Robert Lyell M. D.—Civil employ, Patna.

This Officer was shot down in the streets of Patna while heading a party of the Seikh guard who went out to quell an insurrection.

He served throughout the Punjab Campaign and saw much rough work in the Peshawur Frontier while surgeon of the Guide Corps.* This Officer was remarkable for fearless daring and firm resolution, he was an excellent Surgeon and a most invaluable servant of Government.

Horatio Philip Harris.—Officiating Civil Surgeon Cawnpore, perished in the massacre there. Mr. Harris was wounded with two balls and then addressed the rebels—"Shoot me or kill me; my countrymen will revenge my death." Two Sowars then cut him down: Mrs. Harris perished with her husband.

1849.—George Hansbrow — Superintendent of the Great Central Jail Bareilly, cruelly massacred by the mutineers there.

Mr. Hansbrow was formerly one of the Students in Human and Comparative Anatomy at the Royal College of Surgeons in England.

- 1852.—John Pierce Bowling 56th Native Infantry—Perished in the massacre at Cawnpore with Mrs. Bowling and I child.
- A. Dopping B. A. and M. D. 54th Native Infantry Murdered during the mutiny at Delhi where he held the post of Garrison Assistant-Surgeon.
- 1855.—Marcus George Hill, Oude Irregular Force—Murdered in the mutiny of his Regiment at Seetapore: was the author of an elaborate paper on Insolation in the 3rd volume of the *Indian Annals*.

^{*} Volume II, of this Journal contains an excellent report by Dr. Lyell on the Epidemic Fever of the Eusufzie District.

Robert Henry Bartrum—Killed in action in the advance on Lucknow under Sir James Outram. Mr. Bartrum fell near the Residency and almost in view of his wife, whom he hoped in another minute to meet.

Daniel McAuley, M. D.— Artillery; one of the many victims of the Cawnpore massacre.

Mr. McAuley received his education at the Belfast Medical School.

1856.—Edmund Darby, M. D., died November 22nd, from the effects of a gun shot wound received in action in the advance on Lucknow under Sir Colin Campbell, on the 27th of the previous month.

Mrs. Darby and her infant also perished at Cawnpore. Dr. Darby was a young Officer of great promise, having stood first on the list of passed candidates of his season.

W. H. James, M. D., and F. R. C. S. I. Dr. and Mrs. James were both murdered at Augur, when the men of the Gwalior Contingent mutinied there.

The other casualties are,

DIED.

Surgeon.

Wm. Amys Rolfe.

Assistant Surgeons.

Sam. R. Tucker, M. D.
William Gardiner Morris, M. D.
John Kirk.
Wm. Boyle Chavasse.
Thos. H. Woodward.
Frederick C. Bushman.
Henry Thomas Cary.
T. Čarthew Gillett.

RETIRED.

Surgeon General Charles Renny, C. B. Surgeon General James Buncle Clapperton. Superintending Surgeon John Grant. Superintending Surgeon Thomas E. Dempster. Surgeon Kenneth MacKinnon, M. D. Surgeon Robt, H. Irvine, M. D.

THE INDIAN ANNALS OF MEDICAL SCIENCE,

OR

HALF-YEARLY JOURNAL OF PRACTICAL MEDICINE AND SURGERY

FOR THE

Three Presidencies and the Eastern Colonies.

This Journal was established last year, and three numbers have now been published. Each contains from 350 to 450 pages of letter-press.* A list of the contents is herewith annexed. The Editors are desirous that the ANNALS should constitute a medium of free professional communication, and thus promote the advancement of Practical Medicine and form a record of its current progress in the East. Controversies, of a personal and ephemeral character, and all matters coming under the head of Medical Politics, are excluded from the pages of the ANNALS: but this exclusion does not apply to the temperate discussion of opposite views of Theory and Practice.

The enquiries which the Editors have in view, are those which were so long and ably carried out by the late Medical and Physical Society of Bengal, and which at present engage the attention of the Sister Society at Bombay.

- 1. The Meteorology and Medical Topography of the various Districts of India, and the peculiarities of the inhabitants of each, with reference to their Physical character.
- 2. The diseases of the Country, as they affect both Europeans and Natives, with their treatment, adhering closely to ascertained facts and deriving these, if possible, from local and personal experience.
- 3. The diseases peculiar to Natives, and mode of treatment followed by Native practitioners, together with the received opinions as to their nature and causes.
- 4. The Materia Medica of Hindostan, whether animal, vegetable, or mineral productions of the Country or artificial compounds employed in native practice, with their Chemical Analysis.
 - 5. The History of Medical Science, in general, in the East, both in its past and present condition.
- 6. Accounts of diseases affecting the lower animals as the Horse, Camel and others, more particularly valuable from their services to man.
- 7. The collection of Medical and Vital Statistics, with especial reference to ratios of mortality and births in different races.

THE REVELATION OF ANGLO-INDIAN APATHY furnished by the history of that growing insalubrity which has just culminated in a severe epidemic of cholera at the most favoured of our sanitaria is positively startling. Had the conditions which have gradually converted Simla into a nursery of disease been of a recondite character, the result would have been a misfortune, but no one could have been blamed, But it is beyond doubt that Simla has been deliberately poisoned under the very eyes of the Government, and in spite of the protests of its medical advisers. There is nothing which it is harder to get the non-professional mind to realise than the closeness of the connection between dirt and death. Every one fully recognises the fact that dirt is a nasty thing to see or smell; but that it is a destructive thing, when masked from eyes and nose, even Viceroys and Councillors of State are, it seems, slow to believe. So far back as 1852—we are indebted to the Indian Medical Gazette for the facts-Dr. Grant, then Givil Surgeon of Simla, wrote that "nothing could be worse than the state of the conservancy." The ravines intersecting the station were filled with human ordure, offal, and dead animals; and, as a consequence, diarrhœa was so prevalent that immunity from it for a whole season was the exception."

In 1862 Dr. Clarke wrote: "The native bazar is built of tiers of houses on the south side of the hill, and cuts the station of Simla in two, with about the same number of European houses on the eastern as on the western side of it. Its main street, which is a thoroughfare, and the high road from Chota Simla to Boileau Gange, is kept clean, and is drained by open drains which flank it on either side. Its lower streets are for the most part filthy, badly drained, and with no well-adapted means for clearage. It is densely populated, and the nuisances of this large po-

pulation are allowed to ooze and dribble forta of themselves, finding their way into the several nullahs which run down the side of the hill; so that, in truth, the whole filth of this extensive bazar lies hoarded in these several cesspools during the hot season until the rains, impregnating the air with emanations most detrimental to health. There is no conservancy officer here; and neither the local nor the municipal authorities appear to have instituted any measures for providing for a complete system of drainage. If, in years past, the welfare of the community had been duly considered, some authority or other might have prevented the growth of the bazar to such an enormous and unnecessary extent. It is now a great central evil, militating against the sanitation of the station, and, instead of being, as it should be, a clean, regularly built native city, it is an unsightly collection of houses, and radiating from it in all directions are draius and cesspools, offensive and filthy to a degree."

Dr. Ross, Surgeon to the Commander-in-Chief in 1867, wrote that "the existing sanitary defects had been often brought to notice, but that it it may still be said of Simla as of Rome in the present day, that she will deny the existence of disease until it has gained the upper hand, and there is nothing to be done but succumb to it; and then, on the first symptoms of relief, go back to her old ways, equally incapable of learning from the past of providing for the future."

The water-supply was emphatically condemned by Dr. DeRenzy in 1868, and Dr. May in 1869, when the reservoir was reported to contain "feecal matter, bones, old shoes, sardine-bones, and preserved soup tins." The Government condemning the bastis of Calcutta after this is very much like Satan

Possibly it may have been thought that no amount of neglect could do any harm at an altitude of six or seven thousand feet above the sea-level. Yet the lesson of Utakamand might have shown the fallacy of such a view. "Simla, with all its advantages of climate," says the Indian Medical Gazette, coming used up / And, unless some very energetic and continued sanitary measures are taken, it will not only become dangerous as a resort of invalids, but also to healthy people. In fact, we should not be wrong if we stated it has already become dangerous. The question of the sanitary condition of Simlais scarcely a local one, as it may affect thousands of us resident in India, called by business, impelled by sickness, or 'on pleasure bent,' visiting that station."

